

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) ~~An apparatus~~ A system comprising:

a compression ignition engine operable in a first, normal running mode to produce exhaust gas, and operable in a second mode, which second mode produces an ~~producing~~ exhaust gas comprising an increased level of carbon monoxide (CO) relative to the exhaust gas produced in the first mode;

means to switch engine operation between the two modes; and

an exhaust system disposed downstream of the compression ignition engine for receiving the exhaust gas therefrom, the exhaust system comprising a catalysed component comprising a substrate monolith comprising a palladium (Pd) catalyst supported on a first support material associated with at least one base metal promoter and a platinum (Pt) catalyst associated with the supported Pd catalyst, wherein the catalysed component is ~~selected from the group consisting of:~~

(i) ~~an oxidation catalyst, or~~

(ii) ~~a catalysed soot filter, and~~

(iii) ~~a NO oxidation catalyst, and wherein when the catalysed component is the NO oxidation catalyst, in combination with a filter is located downstream thereof of the catalysed component.~~

2. (Currently Amended) ~~An apparatus~~ The system according to claim 1, wherein the engine is configured to produce exhaust gas comprising >2000ppm CO when running in the second mode.

3. (Currently Amended) ~~An apparatus~~ The system according to claim 1, wherein the substrate monolith further comprises ~~an arrangement of a supported catalyst~~ having an arrangement selected from the group consisting of:

- (a) a first layer comprising the Pt catalyst and a second layer overlying the first layer, which second layer comprising the supported Pd catalyst and the associated at least one base metal promoter;
- (b) a single washcoat layer, which layer comprising the supported Pd, the associated at least one base metal promoter and the supported Pt catalyst, wherein the Pd catalyst and the Pt catalyst are each supported on a separate and distinct particulate support material; and
- (c) a supported Pt catalyst located downstream of the supported Pd catalyst and the associated at least one base metal promoter.

4. - 12. (Cancelled)

- 13. (Currently Amended) ~~An apparatus~~The system according to claim 1, further comprising an engine control means, wherein the engine control means comprises an engine control unit (ECU).
- 14. (Currently Amended) ~~An apparatus~~The system according to claim 1, wherein the means for switching between the two modes switches between the first mode and the second mode when the temperature of the supported Pt catalyst is $<250^{\circ}\text{C}$.
- 15. (Currently Amended) ~~An apparatus~~The system according to claim 2, wherein the Pd catalyst and the Pt catalyst are both disposed on the same support material.
- 16. (Currently Amended) ~~An apparatus~~The system according to claim 1, wherein the at least one base metal promoter is selected from the group consisting of a reducible oxide, a basic metal and mixtures of any two or more thereof.
- 17. (Currently Amended) ~~An apparatus~~The system according to claim 16, wherein the at least one reducible oxide is an oxide of a metal selected from the group consisting of manganese, iron, copper, tin, cobalt and cerium.
- 18. (Currently Amended) ~~An apparatus~~The system according to claim 16, wherein the at least one reducible oxide is selected from the group consisting of MnO_2 , Mn_2O_3 , Fe_2O_3 , SnO_2 , CuO , CoO and CeO_2 .

19. (Currently Amended) ~~An apparatus~~The system according to claim 16, wherein the reducible oxide is dispersed on the Pd catalyst support material.
20. (Currently Amended) ~~An apparatus~~The system according to claim 16, wherein the Pd catalyst support material comprises particulate reducible oxide.
21. (Currently Amended) ~~An apparatus~~The system according to claim 16, wherein the at least one basic metal is selected from the group consisting of
- an alkali metal selected from the group consisting of sodium, potassium and caesium,
 - an alkaline earth metal selected from the group consisting of barium, magnesium, calcium and strontium,
 - a lanthanide metal selected from the group consisting of cerium, praseodymium and lanthanum, and
 - mixtures, compound oxides or mixed oxides of any two or more thereof.
22. - 24. (Cancelled)
25. (Currently Amended) ~~An apparatus~~The system according to claim 1, wherein the support material is selected from the group consisting of alumina, silica-alumina, ceria, magnesia, titania, zirconia, a zeolite, and mixtures, composite oxides or mixed oxides of any two or more thereof.
26. - 29. (Cancelled)
30. (Currently Amended) ~~An apparatus~~The system according to claim 38, wherein a supported catalyst part of the catalysed component contains from 0.1 to 30.0% by combined weight of Pt and Pd based on the combined total weight of the supported Pd catalyst and the supported Pt catalyst.
31. (Currently Amended) The system~~An apparatus~~ according to claim 38, wherein a supported catalyst part of the catalysed component contains a weight ratio of from 95:5 to 10:90 Pd:Pt.

32. (Currently Amended) ~~An apparatus~~The system according to claim 1, wherein the catalysed component comprises from 30 to 300g/ft³ Pd and from 30 to 300g/ft³ Pt.
33. (Currently Amended) ~~An apparatus~~The system according to claim 38, wherein the supported catalysts contain from 0.1 to 10% Pt by weight and from 0.1 to 20% Pd by weight based on the combined total weight of the supported catalysts.
34. (Currently Amended) ~~An apparatus~~The system according to claim 1, wherein the engine is a diesel engine.
35. (Cancelled)
36. (Currently Amended) A process for operating an apparatus comprising a compression ignition engine operable in a first, normal running mode to produce exhaust gas, and a second mode, ~~producing~~which second mode produces an exhaust gas comprising an increased level of carbon monoxide (CO) relative to the exhaust gas of the first mode, means when in use to switch engine operation between the two modes and an exhaust system comprising a catalysed component ~~selected from the group consisting of:~~
- (i) ~~an oxidation catalyst~~ or;
- (ii) ~~a catalysed soot filter; and~~
- (iii) ~~a NO oxidation catalyst, wherein when the catalysed component is the NO oxidation catalyst, in combination with a filter is located downstream thereof of a catalyst component,~~
- and wherein the catalysed component comprises a substrate monolith comprising a palladium (Pd) catalyst supported on a first support material associated with at least one base metal promoter and a platinum (Pt) catalyst associated with the supported Pd catalyst, which process comprising running the engine in the first, normal running mode and switching the engine to the second running mode producing a value of at least one measurable parameter indicative of a condition of the engine is outside a pre-determined range.
37. (Previously Presented) A process according to claim 36, wherein the at least one measurable parameter is selected from the group consisting of exhaust gas temperature,

catalyst bed temperature, mass flow of exhaust gas in the system, manifold vacuum, ignition timing, engine speed, throttle position (accelerator position), the lambda value of the exhaust gas, the quantity of fuel injected in the engine, the position of the exhaust gas recirculation (EGR) valve and thereby the amount of EGR, boost pressure, and engine coolant temperature.

38. (Currently Amended) ~~An apparatus~~The system according to claim 1, wherein the Pt catalyst is supported on a second support material.
39. (Currently Amended) ~~An apparatus~~The system according to claim 1, wherein the substrate monolith comprises an arrangement of the Pd catalyst and Pt catalyst components selected from the group consisting of:
- (a) a first layer comprising the Pt catalyst and a second layer overlying the first layer, which second layer comprising the supported Pd catalyst and the associated at least one base metal promoter; and
 - (b) a Pt catalyst located downstream of the supported Pd catalyst and the associated at least one base metal promoter.
40. (Currently Amended) The system~~An apparatus~~ according to claim 12, wherein the ~~or each~~ support material is selected from the group consisting of alumina, silica-alumina, ceria, magnesia, titania, zirconia, a zeolite and mixtures, composite oxides or mixed oxides of any two or more thereof.